



STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

128-10th Avenue SW • P.O. Box 42525 • Olympia, Washington 98504-2525  
(360) 725-2966 • fax (360) 586-9383 • e-mail sbcc@cted.wa.gov • www.sbcc.wa.gov

### MINUTES

#### STATE BUILDING CODE COUNCIL

**Date:** February 12, 2010

**Location:** Seattle Area Pipe Trades, Renton

**Council Members Present:** John Cochran, Chair; Kristyn Clayton, Vice Chair; Ray Allshouse; Rod Bault; Angie Homola; Dave Kokot; Jerry Mueller, Tien Peng; Dale Wentworth

**Council Members Absent:** John Chelminiak, Mari Hamasaki, Bob Koch

**Visitors Present:** Joe Andre, Pete Crow, Patrick Hayes, Eric Lohnes, Gregory Staats, Tom Nichols, Paul O'Connor, Anjela St. John, Chuck Murray, Tim Sommers, Chris Winslow, Garrett Huffman, Chris Ricketts

**Staff Present:** Tim Nogler, Krista Braaksma, Joanne McCaughan

#### CALL TO ORDER

John Cochran, Council Chair, called the meeting to order at 10:15 a.m. John welcomed everyone. Introductions were made.

#### REVIEW AND APPROVE AGENDA

The agenda was reviewed. Tim added an initial discussion of a City of Tacoma local ordinance under Other Business. With that addition, the agenda was approved as amended.

## **REVIEW AND APPROVE MINUTES**

The minutes of the January 8, 2010 Council meeting were reviewed and approved as written.

## **PUBLIC COMMENT ON ITEMS NOT COVERED BY THE AGENDA**

Pete Crow, International Association of Plumbing and Mechanical Officials (IAPMO)

We saw in the last meeting minutes (I couldn't attend the meeting) that you're going to form a Green Building Committee to look at green codes. We would request that the Council assign a Green Mechanical Code Supplement, that's published by IAPMO that's now in print, to the Plumbing and Mechanical TAGs for their review.

The code is specifically for plumbing and mechanical. It works with all codes, no matter which codes are adopted in jurisdictions. It has to do with water and energy efficiency. It's a great code.

I had one copy with me. And I gave it to Mr. Wentworth, for him to start reviewing. We think it would be a good idea to get that process started.

John thanked Pete and asked him if IAPMO will furnish copies of the supplement to Council members. Pete said if he's given a number, IAPMO will make those complimentary copies available for the Council to review. John suggested Pete work with Tim Nogler about the number of copies needed.

## **PUBLIC HEARING**

John said the purpose of today's meeting is to receive public testimony on the findings and objections of the Joint Administrative Rules Review Committee (JARRC) about the 2009 Washington State Energy Code (WSEC), WAC 51-11.

Tim welcomed Rod Bault and Dave Kokot to Council membership. This is Dave's first meeting. As Fire Protection Engineer with the City of Spokane, Dave represents local government fire service officials.

Tim said Council legal counsel, Sandra Adix, isn't present today because of a death in her immediate family.

Tim provided a summary of events surrounding the JARRC complaint against Council energy code rulemaking. He said Part 6 of the Administrative Procedures Act (APA), RCW 34.05, establishes the JARRC. The JARRC held a hearing on October 1, 2009 based on rulemaking the Council was proceeding with on WAC 51-11. The Council received a letter from the JARRC on October 14, 2009, requesting additional information on economic impacts. Following a special meeting of the Council's Economic and Regulatory Assessment Committee (ERAC), and an additional adoption hearing in November 2009, an amended version of the WSEC was adopted.

The JARRC was advised of the results of the hearings. JARRC found, after another public hearing on December 2, 2009, that the Council response was inadequate, as specified in the JARRC's December 9, 2009 letter that is the subject of today's hearing. That letter informs the Council that the JARRC unanimously recommended suspension of adoption and implementation of WAC 51-11, publication of the suspension in the State Register and introduction of legislation during the 2010 session to delay implementation until the Legislature receives the requested analysis.

Tim said RCW 34.05.630(3) and (4) state:

If the rules review committee finds by a majority vote of its members:  
That an existing rule is not within the intent of the legislature as expressed by the statute which the rule implements, that the rule has not been adopted in accordance with all applicable provisions of law, or that an agency is using a policy or interpretive statement in place of a rule, the agency affected shall be notified of such finding and the reasons therefor.

Within thirty days of the receipt of the rules review committee's notice, the agency shall file notice of a hearing on the rules review committee's finding with the code reviser and mail notice to all persons who have made timely request of the agency for advance notice of its rule making proceedings as provided in RCW 34.05.320. The agency's notice shall include the rules' review committee's findings and reasons therefor, and shall be published in the Washington state register in accordance with the provisions of chapter 34.08 RCW. The agency shall consider fully all written and oral submissions regarding whether the rule in question is within the intent of the legislature as expressed by the statute which the rule implements, whether the rule was adopted in accordance with all applicable provisions of law, and whether the agency

is using a policy or interpretive statement, guideline, or document that is of general applicability, or its equivalent, in place of a rule.

Tim said the Council has received a couple pieces of written testimony. The Council will deliberate on the oral testimony received at this hearing, as well as written testimony previously submitted and forthcoming.

Angie Homola asked Tim to clarify the opening and closing dates for the public comment period. Tim said the public comment period is closed. Council rulemaking is finished. The meeting today is specifically about the JARRC objection, which is based on the procedure followed by the Council in its WAC 51-11 rulemaking, not on the technical aspects of the WSEC. The JARRC objection was fundamentally that the Council didn't comply with all the provisions of the law, specifically with the Small Business Economic Impact Statement (SBEIS).

## **PUBLIC HEARING**

### **Greg Staats, Windorco Window Company**

I watched on the computer, a video and an audio of a presentation made by Mr. Nogler and Kristyn Clayton to the JARRC Committee. The JARRC Committee chairman asked specifically if anybody was able to produce a SBEIS. And I heard kind of illusions that it was kind of there. But at the time, no one was able to produce one.

And so I'm wondering at this time, has anybody come up with one, or is there anything that we could actually see?

Tim said a preliminary SBEIS was filed with the proposed rule. Greg asked how it was done and if he can see it. He said he doesn't know of anyone who was contacted about economic impacts. Tim answered that the final analysis is available, based on the actual adopted rule which differs from the proposed rule, on the Council's website at [www.sbccc.wa.gov](http://www.sbccc.wa.gov).

### **Chris Winslow, Bronze Craft**

As I understand it, from your testimony, and your testimony before the JARRC, that economic impact statement was insufficient. You said it was theoretical. You admitted to that on direct examination, Kristyn, and that there was no, as you put it I think, "real boots on the ground" analysis. So I don't know why we would even want to hear about a report that was inadequate by their judgment and say "now we're going to respond to it." They've already responded to it. You need a real world economic analysis, and that hasn't happened.

We don't need the pep talk rally you all had in December, saying what a fine job you had done, working so hard. We're in an economic meltdown right now. And you're adding to it, without realizing it. Maybe you do realize it. I hope you don't realize it, because it shouldn't be happening.

We need to have real proof of what can happen because of the code changes that you are proposing. And we have not had that. We've had theoretical studies. And that's it. But we don't live in a theoretical world. Every one of us wants to eat something every single day. And that means I have to make money to do that. And I can't do it right now in the economy, and I'm sure as hell not going to be able to do it very well with the concepts that you guys as a Council have proposed.

It's very frustrating to see this happening. And I'm sure the Legislature is very frustrated also. They're now going to consider revoking what the citizens have asked them to do, which is to cut spending. You know what I'm talking about, 696. Anyway, I would like to have that done somehow. And if it isn't done, then you should rescind the rules that you've proposed. It's as simple as that.

**Eric Lohnes, Building Industry Association of Washington (BIAW)**

I'm here today to speak to, and to concur with, the findings of the JARRC. The JARRC found, as you guys know, that the Council failed to comply with the requirements of the law. And they're listed out the specific references to the law in their WSR 10-10-065.

With respect to the SBEIS, some of the specific things that they mentioned are that the Council failed to estimate the number of jobs created or lost, and that the Council failed to support the SBEIS with a detailed cost analysis, including but not limited to the cumulative impacts of all these changes that were considered. And, by your own admission, these were significant changes.

The JARRC concluded that the Council worked diligently, but it did not fully consider the economic impacts of the costs versus benefits of the significant proposed changes to the WSEC. As a result of the aforementioned issues and findings, they have recommended the suspension of the rule. And the JARRC unanimously, which I think they've spoken strongly with one voice, a bipartisan committee has unanimously said that they object to these rules, unless or until the Council goes back and reviews them and looks with greater detail into them.

One of the specific objections that we have, and it's something that you guys are going to be familiar with because we've brought it up before, is that the numbers, the cost information that was included by the building community was, from our perspective, not looked at very seriously. The SBEIS was, and correct me if I'm wrong, but was prepared by the Department of Commerce, was authored by one of the proponents of a vast majority of the original energy proposals that were offered. And so, and this was brought up in one of the

JARRC hearings, I believe one of the representatives said that he wanted to see more data, more information from those people who were actually building homes.

And so our request would be that the rule be suspended until the Council goes back and has a chance to incorporate costs considered by builders.

**Patrick Hayes, BIAW, energy consultant**

The JARRC has voted and spoken. I was there. I testified. These are a group of very intelligent, passionate legislators, bipartisan, from both houses. I think the Council should take that vote very seriously. We all have the documents. There is a huge hole. Before you went to rulemaking, there was no economic impact statement or SBEIS on multifamily.

And we took multifamily, moved it from Group R, put it into the nonres portion of the code, changed the whole methodology and changed the values. The bulk of it is in roofs and in windows, and a huge change on vinyl windows. I'm doing the math right now with my clients. Going from a .40 vinyl window that was in the current code to a .32 is not just an incremental jump. It's a huge jump.

Rank and file sliding windows that go into multifamily projects, the bulk of them will not meet .32 without going to a superspacer, which is an insulated spacer product that the bulk of these manufacturers don't make. A couple of them do, two, right off the top of my head, a company in Spokane and a large company in Tacoma. The rest of them don't. So we took a look at a recently completed project. And I had the numbers run this week. The original window package, \$253,000. Okay, that was a .40 window. To go to a .32, it's all sliding windows, and the sliding doors don't make it, and they don't do superspacers, same manufacturer, have to go to casements on all the sliding windows, which bumps it up to 33 percent. That's the information you didn't have when you went to vote. That's significant.

Raised heel trusses versus R-49, there's another high-dollar thing. They did not get all those numbers back to me before this meeting. I would have liked to have them, but it's still information that was void, and the effect on those manufacturers that you went to rulemaking and didn't have, and the stuff that you're clinging to. We all know that we have it; you know, it's cost analysis. The data examined (This is your letter, John?) by the Council is based on the receipts to utilities. Utilities aren't in the building business. They're not designing a house or a multifamily project, going and getting a permit, and inviting subs to bid on it, advertising in construction trade papers for subs to come bid. This is homeowner exchange retrofit stuff.

When we write a building code, it's about new construction and going and getting a building permit and hiring a contractor to go do the project. It's not about soliciting.... If I'm going to go build a house, I don't go to my utility and say, "What's this going to cost me to build this house?"

Going through this analysis, you know, it came out of one single source, NEEA-funded people, you know, which goes right back to the utilities. It did not come out of industry. The

JARRC specifically requested that data come from the industry. I think if you were going to go into a construction project, anybody in this room, you would want a detailed cost analysis by your contractor to make an executive decision. I know I would. I see the binders. I sit in design meetings. When someone says, "Section 8, let's look at Section 8 and all the items that are in Section 8, let's go to windows," we open it up. We've got three bids to evaluate. And then we decide which way we're going to go. And we make an informed, executive decision.

This rulemaking process did not have that kind of information available to you. And you should have had it. And where it had to come from, if the Council needed to get resources or if NEEA is funding this sort of thing, you raise your right arm and say, "No, don't go to that source. Get it from industry, like they ask." And that didn't happen. So thus, we have a set of rules that are marching down the path. It may not have much down that path, had you had the right information. The vote may have been different, in this economic time, with this kind of impact.

I have two downtown towers right now, one is in residential towers, apartment buildings. They got put on hold during the skid. The designs right now will not (I've already done the analysis) meet the letter of this multifamily code. So my client, Securities Properties (I'll name their name, no small players) are in intensive evaluation right now. And we've had meetings with the banks, whether we can go forward. They have to permit that design before July 1, 2010 if this code goes through. If they don't, and they're scared to death due to the economy, then all that goes poof, in the garbage. And there's two others just like that.

So is that the responsibility of the Council? You know, maybe had you had the cost information and that analysis and that kind of information before your fingertips, we wouldn't have moved the multifamily thing forward. We would have said, "Well," or we would have adjusted the values in amendment, or we would have changed the glazing ratio so that it was more accommodating of current designs in process. Those are things that could have happened, had you had information.

I'm asking, and recommending to the Council, that you follow the recommendation of the JARRC. Those legislators were very, very passionate and intelligent people. They did not make a rash, uninformed vote. They took it very seriously. And they knew what they were talking about.

I would ask that you follow their instructions, suspend the rulemaking, regroup, do it in either the next code cycle or the next year if you can do it in between code cycles, and reanalyze the steps, whether you start from scratch again with new proposals, or whether you work with existing docs. But throw the brakes on and then revote, where you can be proud of the vote and not go to bed at night, "Geez, what Mr. Hayes said is bothering me..." I wouldn't want to go to bed like that myself. I would throw the brakes on, regroup, if it takes a year. This economy...read the construction trade paper predictions, go to Reed, read construction data, go to Dodge. It says, "flat line." That's what it says. You could take a year off, and you're not going to miss any energy savings, because nothing's going to get built hardly, you know.

The latest stuff I got on the architectural community, you know, it's minus 33 percent. Buildings have just started to increase according to Reed Construction data. Architectural invoicing has incrementally gone up, which is an indication that projects are coming into the design pipeline. But you're not going to see them built for 18 months, by the time they get through the process. We all know the process.

So, slow down, go back and make a better choice and a better decision. I don't think we're going to lose a Btu per hour.

Dale Wentworth asked Patrick about his numbers. Patrick answered that the standard has already been set by Dave Baylon and Chuck Murray, for data void of supporting bids. He said all analysis should be held to the same standard. Had he been asked, Patrick said he would have voluntarily supplied data to the Council. He has a proprietary energy calculation program that he wrote in Excel that can be applied to hundreds of buildings. Patrick said he was not asked. He's not paid by the BIAW, but volunteers his time on behalf of his clients and the building industry. Patrick said the JARRC and proposed legislation is asking for Council standards to be raised. They want Council decisions based on better documents. Patrick said there's no emergency surrounding energy code changes. Voluntary programs, such as Built Green, are currently being implemented. The Council has an obligation to the state's economy and all industries in the state to not overreact with energy code changes. Although he would profit from them, Patrick is against the package of energy code changes, because they're too many, too soon.

Referencing windows, John asked if there are specific components within rulemaking that Patrick would have done differently. Patrick answered yes, absolutely. He said more reasonable solutions were overridden at the Energy Code TAG by proprietary voting. Patrick said he testified about new superspacer products at the TAG.

#### **Garrett Huffman, Master Builders Association of King and Snohomish Counties**

I had a few comments I was going to make, but there's no reason for my commentary to resolve or make light of Mr. Hayes' comments. We agree with him fully. His opinion is regarded very highly among our industry and associations. What he brought to you previously we agree with, and that there should be more effort looked into this, because there are a number of our members who are quite frustrated at this point and don't know what they're going to do.

In fact, Snohomish County has a big question about what they're going to do, because they don't have any money to train their staff to review plans come July 1. Eric Reardon is looking for some way to mediate this. And there's nothing out there that he can do. There's no



money that he can get to train his employees to review our plans when we submit them after the first of July.

So there's a number of things that are coming to light that makes it very difficult right now. I don't have a lot more to say. We are happy to work with you. This very problematic for our industry. We please hope that you'll take into account the difficulty that this is going to mean for us, come July 1.

**Tim Sommers, Cherry Creek Door and Window Company**

I think Patrick really hit the nail on the head in many respects. The JARRC was pretty clear in what it wanted. In its December 2 meeting, it kept asking energy code council representatives and, well, basically everybody that testified in front of it, asked them about the criteria that they were using to (a) formulate the design of the cost/benefit analysis, and (b) the criteria for which they were going to implement that data into their decision-making process. It became real clear that nobody had even contemplated that. There was no answer to that.

What you've got here is a "cart before the horse" situation. When you look at the chronology of what's happened, the actual costing analysis came behind rulemaking, not in front of it. Like JARRC said, the whole reason for this, for the cost/benefit analysis and also the jobs impact analysis, is to inform the rulemaking process. It's for the Building Code Council and the Energy Code Council. It's for them. It's not for JARRC. JARRC is sitting there as a policing organization. They are policing whether or not the process was followed correctly. And they've correctly identified that the process was backwards.

Now, I can't help but wonder if Chairman Hasegawa hadn't read at one point a paper that a really good friend of mine and a former classmate at Preston College wrote back in, I think it was, well I'll tell you when it was, it was in August 19, 2005. Randy Udall, the son of Senator Mark Udall and Senator Tom Udall. Tom Udall is Mark and Randy's cousin. Mark is Randy's brother. I went to school with Randy. He's a good friend of mine. He's been in the green building movement since the 1970s. Preston College actually was one of the premier educational institutions accepting environmental, ecological and energy issues at an undergraduate level, starting back in 1966. Randy wrote a paper called "LEEDs is Broken; Let's Fix It." Now, he and his partner, Audon Schindler, who owns Aspen Ski Company (By the way, Randy currently directs the community office of resource efficiency core in Aspen, Colorado. He's the director of that. He also serves on the board of directors of Solar Energy International in Colorado, a renewable energy site)....Right now, there's a schism that's happening within the whole green building movement. A lot of people that have been in the green building movement for over 30 years are starting (And I'll name some people. You've got, well Randy's one; John Schofield, physicist, Overland University, Overland College. He just wrote last year a pretty... I guess, the new building institute down by Vancouver came out with a study of LEEDs buildings. And basically they said, well, the LEEDs buildings are saving between 25 and 30

percent energy. John Schofield took a look at that data and came up a completely different look at it. In fact, LEEDs buildings compared to conventional buildings were actually inferior in their energy savings, especially in site energy intensity or source energy intensity, to the tune of about 10 percent, based on that same data. Now, there were a lot of flaws in the way that study was done. It was a study of data that LEEDs itself had gathered. They had some methodological problems. They were comparing means to medians, which those two things don't mix. But anyway, I'm digressing here. Randy wrote that paper and basically it was an excoriation of both the U.S. Green Building Code Council and the LEEDs Program. Randy and Audon had built the first LEED-certified building in Colorado. So he thought that building a second one was not going to be that big a deal. They were building a clubhouse actually, for the Aspen skiing community. They were trying to build it to a LEEDs gold or platinum standard. The further they got into the process, the more upset they became with the process. And finally they wrote this article. I can give you a link to that article or the article itself. I can e-mail it to you in electronic form.

In regards to this LEEDs study that was done last year, actually a couple years ago, in 2008, that study was criticized not only by John Schofield, but it was also criticized by Henry Gifford at EnergySavingsScience.com. You can read his report on that.

Anyway, there's a conflict of things happening here. It's a very unhappy confluence. You have an economic problem. You have energy...there is absolutely no question that we have to figure out ways of getting a lot energy smarter than we have been. But we've got an economic problem that nobody in our generation (our parents saw a problem back in the 30s maybe that rises to the level of the problem that we have now), but this is truly horrendous. So we have that confluence. And we have a schism within the green building community itself. As Henry Gifford said, "You want your future to depend on continued low energy prices? Is your building as healthy and as comfortable as it can be? How to get there: An analysis of building energy use to find the most effective places to start saving. No magic gadgets, no black box software, just common sense, heavy on measurement, light on computer simulation."

Now, the JARRC wanted real world costing. Now there is no real world benefit analysis, because nobody's been keeping records. There's just not enough data out there to really say how much energy we're saving. There's little bits of it here and there. Energy Star has some, DOE has some, LEEDs has some. But what's happened here is, I don't know if you're aware of this or not, but this has risen to be such a crisis within the country itself nationally that these kinds of conflicts that we're having right in here are not limited to just Washington State. This is becoming a national issue. And I don't know, are any of you aware of what the National Institute of Building Sciences is doing on these issues right now? It has to do with the issue of regulation and accreditation. Are you aware of it? Apparently not.

This goes right to the heart...why is it so important that we do things the way JARRC want us to do it? Conclusions from this task force already...there's very limited data that

correlates verifiable improvements in building performance with building rating certification systems. This is their conclusion. Many people view the few data sets that do exist as controversial in terms of methodologies and conclusions drawn from them. There's limited building operations data that can be used to benchmark actual performance against specific building rating certification systems. The data that is collected is not done consistently nor to the agreed-upon standard format. And I could go on and on.

One really important thing here, and we're getting so upset about a lot of this stuff, is this is getting to the point now where it's starting to affect business insurance or liability issues, the whole question of owner expectations and professional liability. Quoting the National Institute of Building Sciences, there's a growing concern that design and contract reliability risk may rise if performance expectations are not realized in completed projects. Building rating certification systems in individual accreditation programs are beginning to impact the professional standard of care recognized by law in the building community. The vast majority of insurance claims involve misrepresentation, miscommunication and misunderstood expectations between owners and design and construction professionals.

There are growing concerns that the implied guarantees of building energy performance emanating from building rating certification labeling and coding systems may confuse or mislead policymakers or the public. There are no common set of metrics or consistent methodologies that determine building performance levels relative to achieving targets, requirements defined by building ratings and certification systems.

I can go on and on and on...I'm going to stop there. Right now they're in the middle of..they're going to produce a report this spring, and it's going to provide some national guidance in terms of accreditation and policy making. I would highly suggest that the Building Code Council and the energy code council keep their ears out, and keep their eye on what the National Institute of Building Sciences is doing. Like I say, there's this confluence of things happening. Now, in his paper, it's called "A Better Way to Rate Green Buildings," Henry Gifford had this to say, and I think that this goes right to the heart of what JARRC wants and why it wants it:

The U.S. Green Building Code Council has squandered the tremendous public good will that has accumulated behind the cause of environmentally friendly buildings. This shocking failure raises the question of what could go so wrong in buildings to produce results opposite to what so many people are trying to achieve. The answer is that attention is focused on the appearance of energy efficiency not its accomplishment. LEEDs does not reward designers for performance. The system

does this by rewarding designers for predicting that an energy will save energy, not for proving that a building actually saves energy.

This is what JARRC was saying. They want real world numbers, looking at real world costs, and real world job impacts. This simply was not done. Now, when I read the cost impact analysis that was provided for the commercial and residential.... There's just not enough there for me to really comment on it, except I don't know whether or not the energy savings were...I can't really tell from looking at just those numbers, whether that's site energy intensity savings or source energy intensity savings. Right now, the EPA and Energy Star...I mean, it's common to look at these kinds of savings in terms of site energy intensity. However, EPA and Energy Star are now starting to,,,the trend is to require that these energy savings be expressed in source energy intensity. You can have cases where you get an apparent site energy intensity savings and actually have a net source intensity loss.

But anyway, methodologically my comments quickly here on things that I did read, the metastudies, that's not what the JARRC wanted. The metastudies of information that was provided by, basically that's been gathered by, power and utility companies and massaged by Northwest Energy...

My point is that the JARRC is right. And everybody knows they were right. There was no valid cost benefit analysis, like Patrick said. We know what those look like. There was no job impact statement or analysis. I mean, Peter DeVries said, I think at the January 8 meeting, that he doubted that one could be done. And you know what, he might be right. However, right now, like BIAW has just said, there is a big gulf between how much is this going to cost, compared to what it's going to save us. In other words, is it going to cost us \$1,500 minimum, or is it going to cost us \$10,000 as the aggregate result of these code changes. There's a big gulf there. That gulf has to be brought together somehow. And industry says it's between \$10,000 and \$35,000. Adair Homes produced some documents that look the same. It's going to be 20 percent across the board. What's the truth there? Really, we don't know. So that's what JARRC wants. Now, like I say, here it is. And I think you might be right in this environment with the way the economy is going, there's so many factors that you have to look at, it may be impossible to do a jobs impacts analysis. If that's the case, if you don't know what your outcome is going to be, if you can't make some credible conclusions about the consequences of your actions or your outcome's going to be, you can't make policy. It's my recommendation that rules be suspended, that the existing work...And I know that you guys worked hard. I went to the TAG meetings. I mean, I read through every single one of the original 172 amendments or proposals. I know the work. There's no reason that a lot of that work can't be taken into a target of coming up with some proposals that have been looked at from the beginning from a cost-benefit standpoint for the next code cycle.

### **Tom Nichols, Smokey Point Wood Windows**

I really can't add anything that hasn't already been said here today. But possibly we should look at the position of the Council. That's some mixup. You have a committee made up of legislators, both parties, saying in their opinion that the law has not been conformed with or adhered to. So what do we do with that? Just forget it? I don't think we can do that with the Washington State Legislature. You just can't tell them, you know, we're not going to do it.

This Council makes law basically, building code, but it's laws. And we expect people to follow those out here. I mean, that's what this is about. So how can, on one hand, the Council expect people to follow these building codes but, on the other hand, the Council doesn't have to follow the law themselves, if in fact a law has...I'm not an attorney. I'm just going by what the JARRC has written. They feel it's been violated.

So, I mean, am I wrong about that? I guess really the only question here is is the Council going to conform or not. That's really it. That's all it comes down to.

### **Chuck Murray, Department of Commerce**

First of all, in case you folks haven't seen it yet, a new commercial analysis, as well as a new residential analysis, were performed based on the actions the Council took. At this point, it's informative, of course.

I would like to comment that the analysis I did on the residential sections, in particular for eastern Washington, I did my analysis based on the prescriptive path. And already folks in eastern Washington are figuring out less expensive ways to meet the code by using the component performance tradeoff method. And the first cost analysis would be much less if I used the types of code compliance methods these folks are beginning to develop over there.

Second, I'd like to say that I've been involved in code development processes at the International Code Council. I've attended ASHRAE energy development meetings. And, of course, I've participated in this one. This, by far, is the most deliberative process that I've attended. It has a far more diverse audience of participants than any of those other code development processes. The voting bodies are far wider in representation than the voting bodies of those other code development processes. And I think, as a result, you have a very robust public process that you utilize here.

The lengthy process that the TAG went through was to gather information for the Council's consideration. Anyone who chose to could have brought information forward and provided it to the TAG and ultimately to the Council. A number of people chose to do that. Those were there for your consideration.

I think finally it came down to there was a requirement because there was a lot of different opinions on the outcomes here, that the Council themselves had to use their own professional judgment as to what pieces of information to use, pieces that were valuable to

them, and which ones that perhaps they wouldn't consider as strongly. And I think, from that perspective, that's how the Council handled themselves.

Finally, I'd like to say, just a point of information, a bill was introduced to the Legislature from the JARRC, asking the rest of the Legislature to consider their findings. Today we've passed the cutoff date for any policy hearings. This would be a policy item. And the JARRC legislation did not receive a hearing, didn't leave committee. And it is extremely unlikely that the Legislature will act in any way at this point in time. So, by their silence, you can, to some extent, judge the opinion of the rest of the Legislature on the JARRC findings.

Now, that's not to diminish certainly the criticism of the JARRC. I think moving forward we've all learned a lot. We're going to consider the request of JARRC fully as we develop future strategies for code. And we'll try our best to do a more robust job that we can all feel proud of at the end of this process.

Kristyn Clayton asked Chuck, regarding the revised economic statement that was performed by NEEA, if he can furnish new commercial and residential percentage overall stringency rates. She said the previous report percentages varied between 12 and 18. Chuck said he can't update those percentages for commercial. However, for residential, there was a reduction in cost, varying on the type of construction, based on Council actions, particularly for forced air heating. Chuck's analysis saw a cost increase in Eastern Washington because of the addition of foam sheathing as the basic requirement in prescriptive. However, he's heard that people in Eastern Washington are already adopting a component performance tradeoff method that doesn't require foam sheathing. As a result, Chuck expects the cost to be quite a bit lower than what he predicted. He said the cost benefit analysis shows a cash flow that hasn't changed much.

Angie asked Chuck to elaborate on the cost analysis data. Chuck said Sixth Power Plan data came from the Northwest Power Planning Council, which is a nationally, if not internationally, recognized data source. They routinely gather cost data from the field. While it is from utility programs, those programs collect receipts from real jobs, both retrofit and new construction. Other data was received from the U.S. Department of Energy (DOE). DOE does a manufacturing cost study, a wholesale cost study and a retail cost study. They segregate by region and by retrofit versus new construction. Public comment is accepted throughout the entire DOE process. It's also received during the lengthy process for the Sixth Power Plan. Chuck acknowledged that a different perspective might be gained through improved communications with the building industry. He pointed out that it's their responsibility to show up with data and noted that a one-off project isn't very useful. Large data sets are needed, not statistics on one or two buildings.

John asked for Chuck's reaction to Patrick Hayes' comments about window performance and the challenge of getting to .32. Chuck said five years ago when he worked at WSU, window studies found that the .32 window for single-family housing was the cheapest window on the market. Chuck said he also knows the window industry is very robust, producing many different products. Without first analyzing Patrick's specific project types, Chuck said he can't comment on Patrick's results.

### **Eric Lohnes, BIAW**

I just wanted to make some very quick comments. The JARRC produced not one bill, but two bills. This shows that the members of the Legislature who are most educated on this issue found it important enough to create two separate bills, that ended up in two separate committees, one of which, I believe, did receive public hearing.

And the building industry did produce cost numbers. Mr. Murray said that he should not have to come begging. Well, he did not. He didn't come asking either. But he certainly didn't have to come begging, because we brought it.

And as an example of the difference, the spread between the cost data that's out there... You guys today on the table here put new homes. He has more numbers here in this report. And they're at odds with the numbers included in the Small Business Economic Impact Statement.

So we did produce numbers. We do want to work with the Council, like we've done with due diligence and trying to make sure that we provided the Council with information.

### **Patrick Hayes**

You chose to hire Mr. Baylon to go down one path. He was paid to produce those numbers. He said that I could volunteer the numbers. Well, he could've offered to pay me too. And we could have produced a data base. As I said, there's hundreds of multifamily buildings loaded on three different computers that go back 10 years. And it's all square footages and U-factors. I doesn't matter whether they're current design or whatever. You could have just plugged in the U-factors and produced the results.

Second of all, regarding window testing, I spent 25 years in the window industry, designing windows as an engineer and thermally and structurally testing windows. I have lost track of the number of thermal tests and thermal simulations on windows that I have done, when I kind of hit the 2500 mark. And now the industry hires me as a consultant to walk them through the process to ensure that they get the specific U-factor that they're looking for to meet energy codes, specifically Washington State's energy code,

So comments about well, we saw this and that was the cheapest really don't have a lot of merit. Go to the industry. Don't go to the Department of Commerce for your answers

regarding very technical things. It is a technical business. And when you run therm simulations on a window and you get x result of therm, which is a computer program that analyzes the heat loss through demonstration profiles. Then the final part of it is you have to test this window in a hot box. And your therm simulations must be within 10 percent of your hot box test or you can't use those simulations.

There's a big scramble right now to get all that work, to get to .32 with particular products. There's quite a unique...when you start doing therm analysis, the relationship of the mass of the say vinyl, you know, mass of vinyl to the efficiency of the glazing and the low heat. As those things change, you get varying U-factor results. Sometimes the glass is enhancing the viny, and other times the vinyl is enhancing the glass. And it's quite interesting to watch this happen.

So when you're trying to design a window system, you draw this thing all up and it all works and all your mechanics and everything, and then, uhh boy, I got to make this thing thermally work too. It's not as easy as.... Any manufacturer that now has to hit this new baseline of .32, and they're not there right now. They're at .33. There's a huge amount of just cost right there, that's not in that analysis. Those guys are going to have to spend money. Baseline for thermal tests from the lab is \$2,500 per series. And it typically costs them another \$1500 for me to manage it. And if you build eight series of windows and then every simulation you only get five simulations inside that \$2500, and every simulation on top of that is \$100 per line item. So if you add grids, change glass, spacers, thicknesses, it doesn't take long to get to \$10,000. Real world numbers. That's the thing that we're focusing on, real world numbers, not government numbers.

Lacking further public testimony, John closed the public hearing at 11:35 a.m.

Kristyn noted that two entirely different things are being talked about today. And people are trying to make them one. She said the paper Tim prepared, based on TAG work was in answer to the legal requirement for a Small Business Economic Impact Statement (SBEIS). Such issues are supposed to come up in the TAG process. That is why meetings are open and so many people are present to answer theoretical proposals with real world data and objections, argument and debate. The Energy Code TAG believed that it had adequately addressed the small business concerns. The TAG held a special meeting, and small businesses got a special default table.

The other thing is what the JARRC asked the Council to do, which was an economic analysis on all 97 energy proposals. Kristyn said this is entirely separate from the SBEIS. The JARRC expanded the scope of what the Council normally does, by asking for the job and cost analysis of all surviving 97 energy code change proposals. Kristyn thinks it's unfair to address passions,



emotions and attitudes simultaneously toward these two issues rather than addressing them independently.

Kristyn noted that Sandra Adix, the Council's legal counsel, is on record as saying that Council actions based on the SBEIS are defensible. The Council correctly followed its process that has been in place for about 20 years for the energy code. While Kristyn acknowledged that the Economic Impact Worksheet for code change proposals is weak, not documenting a rigorous defense of a cost proposal, that worksheet has been acceptable for 20+ years.

The Council directive in 2009 from the Governor, based on Climate Action Team actions over the past two or three years, was to increase the WSEC stringency by 30 percent. That is the reason why energy code changes represented such a significant effort, because they targeted 30 percent.

Kristyn said there is legislation, adopted and signed, that requires energy code stringency in Washington to increase by 70 percent over the next six code cycles. So 70 percent divided by six equals a 11.67 percent increase per code cycle.

The overall result of energy code change proposals according to the economic analysis completed by NEEA, which is not the same as the SBEIS, presents a broad view of costs and savings. While the cost analysis uses real world numbers, the projection of energy savings is a theoretical process, because it relies on operations in buildings, which vary dramatically from circumstance to circumstance.

Kristyn said it's important to understand that the regular Council process was impacted by two things, the Governor's request for a 30 percent stringency increase in energy code requirements and by the worst economic times in recent memory. She agreed that the Council "process, under the harsh light of the legislation, the JARRC, and other people, is not perfect." Ways to improve the process will be discussed this afternoon during the Executive Committee meeting.

In defense, Kristyn said more data should have been produced at the TAG level. She said she, as Chair of the Energy Code TAG, specifically asked for more data. Some was submitted. Kristyn also pointed out that Tim went to the Office of Financial Management (OFM), who went on record as saying they felt comfortable with the amount of data the Council had received. To follow Patrick Hayes' valid approach, the Council would have had to find a funding source to pay a true cost data analysis consultant to do an analysis of all 97 individual energy code change proposals. That was not possible because of the extreme expense and short timeline.

Kristyn agreed with Chuck that when Washington moves to the International Energy Conservation Code (IECC), the process will be considerably worse. She said the IECC doesn't receive one-tenth of the review and debate, or the participation by interested parties, as the WSEC. Proposals arise from unknown sources, are discussed for two minutes and voted on by a very concentrated body of individuals. That has been Kristyn's chief objection to moving to the IECC and IRC. Doing so will result in the complete loss of Washington State's control.

If a rigorous economic impact analysis is desired for all code change proposals, relating to all codes, Kristyn said the standard can be set by energy code change proposals. What that means is that every code change proposal must include the binders that Patrick was talking about to back up the proposal, regardless of code. Kristyn said the problem with that is that the information may be lacking for new technology.

Angie Homola said the idea of trying to do a cost benefit analysis for every code change proposal would be debatable and challengeable. The Council would need to create a fixed, standardized entity to perform all cost benefit analyses. Because of the time involved in doing such analyses, the current three-year code cycle would grow into a five-year code cycle.

Angie said it's important to recognize that the scope of the Council's code adoption is not only based on today's costs. It includes life/safety and job creation/loss, among other things. Another question is the cost of not moving forward. Washington State cannot stay where it is. There will be no jobs if the state doesn't move forward.

The difficult question about code adoption, perhaps more important than the cost impact, is if industry response is possible, if the products are available and the timeframe is reasonable. Angie suggested the TAG process should consider whether the timeframe is adequate for industry response.

Angie said she believes the Council was correct in its conservative estimate about the impact on jobs being neutral or slightly improved. She noted that stimulus projects in Washington State that received federal funding are now being asked if they actually provided the exact number of jobs predicted.

Tim advised the Council that its job, based on the JARRC ruling, is to fully consider all oral and written testimony about WSEC rulemaking. He said several pieces of written testimony have been submitted. Tim said it's incumbent upon the Council to respond to the following questions:

- Whether or not all applicable provisions of the law were followed
- Whether or not the SBEIS was adequate
- Whether or not the Council agrees with the final cost/benefit analysis.

John suggested that the Council wait until the next meeting on March 12 to formulate its response, so there is time to review the minutes of this hearing and written testimony.

#### **Motion #1:**

**Ray Allshouse moved that the Council examine and ponder all oral and written testimony before the March 12, 2010 meeting and formulate its response on that date. Angie Homola seconded the motion.**

Angie asked for confirmation that the public comment period is closed and won't be reopened. Tim confirmed that. Kristyn said these energy code change proposals have been before the Council since last July. So there's lots of history involved, that new members should be aware of. John asked staff to make available to new members copies of all documents filed in the WAC 51-11 rulemaking process. Angie asked if the JARRC hearings are on line, so new members could listen to all the discussion. Kristyn requested that Sandra Adix attend the March 12 Council meeting.

**The question was called for on Motion #1. The motion was unanimously adopted.**

#### **LEGISLATIVE UPDATE**

Tim said the cutoff for passage of bills from the house of origin is next Tuesday. Session is in the 35<sup>th</sup> day, just more than half way through the regular session.

Tim summarized several bills being tracked by the Legislative Committee:

- A bill directing the Council to define green homes passed the Senate committee and is eligible for a floor vote in the Senate.
- A bill amending Council membership for private sector positions has passed out of the House and is now in the Senate.
- Bills to adopt the Wildland Urban Interface Code (WUIC) by reference are eligible for floor votes in both houses. The bills direct the Council to adopt the WUIC by rule.

- A carbon monoxide alarm bill passed out of Committee in the House. It moves the date back to 2013. The installation point is also changed from sale of the home to permit issuance for alterations and repairs, similar to smoke alarms.
- Several bills implementing the JARRC objection have not moved out of policy committees and appear dead.
- The Department of Commerce reorganization bill passed the Senate. It has the Council moving to the Department of General Administration.

Angie asked for clarification about the bills amending Council membership. Tim answered that Senate confirmation was struck from the House bill. The House committee chair didn't support Senate confirmation of gubernatorial appointees to the Council. The House bill passed that body. However, the Senate version of the bill still includes Senate confirmation. Regarding vote nullification, concerns have been expressed by the Governor's Office and Master Builders. Language changes have been suggested about how Council membership is specified. Discussions are currently taking place.

## **STAFF REPORT**

Tim said the work plan will continue to be discussed. On the agenda of today's Executive Committee meeting is bullet item #1. He said a written request has been submitted by the Northwest Energy Efficiency Alliance (NEEA) to look at adoption of the energy code in 2012. Kristyn asked which energy code. Tim said that's the question. The NEEA would like to see more process around the "review and consider" of the IECC. Concern was expressed about the importance of Council members being fully informed about options, pros and cons, and implications about keeping a unique state code or adopting the model code as the base for energy. Tim said the energy code is on the work plan in two places, under the Mechanical, Ventilation and Energy Codes Committee to identify amendments necessary to adopt the IECC, and under the Building, Fire and Plumbing Codes Committee to relocate energy code requirements into the International Residential Code that pertain to one- and two-family dwellings.

Tien said the Council has already voted on the WSEC vs. IECC question. John said the Council has expressed its intent to move forward with the 2012 IECC. During the interim between now and then, the Council will study amendments in anticipation of that move.

Kristyn asked if NEEA has a defined strategy to conduct a heightened review. Tim said no. NEEA believes Council members need more information. Tim suggested that he can add detail to the work plan about logistics, and pros and cons for the next meeting.

Ray Allshouse spoke against reconsidering the prior Council vote to proceed with the 2012 IECC. He said he reads NEEA's letter as asking for reconsideration.

Tim announced that three new members were just appointed: David DeWitte replacing Don Jordan, Mark Kulaas replacing Peter DeVries, and David Peden replacing Tom Kinsman. There will be an overview, orientation session for these new members, held in conjunction with the March 12 Council meeting, as well as a review for existing members. Ray asked that the Council website be updated for the new members.

## **OTHER BUSINESS**

Tim said for many years, the City of Tacoma has required fire sprinkler systems in townhouses. While it's been on the books, Tacoma hasn't enforced the ordinance, because it hasn't been through the Council's local amendment approval process. Tacoma is now asking if its ordinance falls under the preapproval adopted by the Council for fire sprinkler systems, or if the city needs to petition the Council for approval of its local ordinance.

Ray said his opinion, based on Residential Code TAG discussions, is that Council approval should not be required as long as local ordinances meet the technical provisions of the preapproved Appendix S requirements and are not more restrictive than those requirements. He said he's been approached by other local jurisdictions that are contemplating the adoption of fire sprinkler requirements. Instances where Ray believes Council approval should be required are when local jurisdictions add special requirements to the technical provisions. He believes justification is needed in those cases.

Angie expressed concern about the appearance of preferential treatment or lack of standardization. She said there may be unintended consequences of opening the gate too wide for preapprovals. Kristyn disagreed with Ray. She said any deviation from Appendix S should be reviewed by the Council face-to-face with the local jurisdiction. The Council needs to set some boundaries, because this request will be made by other local jurisdictions.

Dave Kokot said obviously fire marshals have held much discussion about fire sprinklers. He said technical deviations aren't allowed by the National Fire Protection Association (NFPA) or

ICC. When fire sprinkler systems are installed, particular technical standards and requirements must be followed. There are a variety of systems. Dave cited an example of a homeowner wanting to install a pump and tank in his basement to run his sprinkler system instead of increasing the size of the water line to his house. He said such a deviation isn't allowed.

Dave said he's concerned about the long-term aspects of residential sprinkler systems. The process involves much education. Washington has decided not to follow the model code, abdicating the decision whether or not to require sprinklers to local jurisdictions.

Angie asked if a decision must be made today. Tim answered no. He wanted discussion so a response can be drafted with options. Ray volunteered to work on a draft, in conjunction with Dave, for the next meeting. He said it's important to make mandatory sprinklers easier for local jurisdictions, not more difficult. He is a little concerned about water districts denying combination systems without some justification. John suggested that Ray, Dave and Tim work together to prepare something for the next meeting.

#### **ADJOURNMENT**

Lacking further business, John adjourned the meeting at 12:35 p.m.